

Applicant: Yao Wang, *et al.*
U.S.S.N.: 10/017,304
Filing Date: December 11, 2001
EMC Docket No.: EMC-01-201

REMARKS

This paper is being provided in response to the Office Action, dated August 9, 2006, for the above-referenced application. The Office Action has been carefully considered.

Reconsideration and allowance of the subject application, as amended, is respectfully requested.

Claims 1-5, 7, 8, 16-18, 20-22 and 24-28 are pending.

Claims 1-5, 7, 8, 16-18, 20-22 and 24-28 stand rejected.

Claim 18 has been amended to correct a typographical error, replacing “an” with “a”. No new matter has been added.

The Examiner has rejected Claims 1-5, 7, 8, 16, 18, 20-22, 24-26 and 28 under 35 USC 103(a) as being unpatentable over Colby (USP no. 6,449,647) in view of Chiou (USP no. 6,792,507).

Applicant would note that the cited references (Colby and Chiou) are the same references cited in rejecting the claims in the prior Office Action. However, the Examiner, in section 23, of the instant Office Action, states that “[a]pplicant’s arguments filed 5/15/2006 have been fully considered but they are not persuasive.”

Applicant respectfully disagrees with the Examiner’s reason for rejecting the claims for the same reasons recited in applicant’s response to the rejection of the claims in the prior Office Action, which are reasserted, as if in full herein, and for the arguments presented herein in response to the Examiner’s remarks made in reply to applicant’s arguments.

Applicant respectfully disagrees with the Examiner’s statement in section 26 that “in the Applicant’s explanation of the prior art of Colby, they have **admitted** that Colby teaches monitoring the network traffic during the data transfer and responsive to monitored network traffic characteristics, selectively requesting an effect on the bandwidth allocation” (emphasis in original). Rather, applicant characterized Colby as teaching for a “desired QoS, a minimum bandwidth is determined based on the content type or file name extension [and] Colby further teaches that a ‘MinBW of the requested content [is calculated] ...’ (see page 9, first paragraph, Response dated May 11, 2006). The applicant further explicitly states that “Colby, however, fails to teach or suggest monitoring the network traffic during the data transfer and responsive to

Applicant: Yao Wang, *et al.*
U.S.S.N.: 10/017,304
Filing Date: December 11, 2001
EMC Docket No.: EMC-01-201

the monitored network traffic characteristics, selectively requesting an effect on the bandwidth allocation.” (see page 9, third paragraph, Response).

The applicant further disagrees with the Examiner’s statement “[a]s cited by the Applicant, Colby teaches QoS which gathers information and utilized several formulas to configure the minimum bandwidth requirements for requested content.” (see section 26, lines 6-7). Rather, applicant refers to Colby’s reference to the use of “content-type to deduce an QoS class, delay, minimum bandwidth and frame loss ratio as shown in Table 1.” (see page 8, last paragraph, Response). Hence, rather than gathering information associated with QoS, applicant correctly characterized Colby as teaching that the QoS class and other related information is extracted from a table of information based on the content-type (or filename extension).

The Examiner further states “[t]o gather any information is the act of monitoring, especially for quality of service (QoS). QoS is a networking term that specifies a guaranteed throughput level. Therefore, to be able to guarantee this service level there would need to be some sort of record of activity of Monitoring [sic] of a device or network to determine if the quality is being met. Furthermore, in the cited area of column 9, line 5 et seq., ‘*the degree to which a particular piece of content served by a server is ‘hot content’ is measured by MONITORING the number of hits (requests) the content receives.*’ It is very clear that Colby teaches the claim language stated by the Applicant.” (emphasis in original). (see Section 26, page 7, line 8-page 8, line 2).

Contrary to the characterization of Colby teaching that QoS requires monitoring to a guaranteed desired level of QoS, Colby teaches specifying a minimum bandwidth that would guarantee the desired level of QoS. As argued above, Colby teaches obtaining a desired level of QoS, from a table, dependent upon the content type or filename extension. The minimum bandwidth or average bandwidth necessary to achieve the desired QoS is determined and devices that provide the determined minimum bandwidth are selected for transmission. As would be appreciated, these devices can possess significantly more bandwidth than the required minimum bandwidth.

Hence, with the selection of devices each satisfying the minimum bandwidth requirement a desired level of QoS can be achieved and maintained without a monitoring of the transmission. For at least this reason, applicant re-submits that Colby fails to teach or suggest monitoring the

Applicant: Yao Wang, et al.
U.S.S.N.: 10/017,304
Filing Date: December 11, 2001
EMC Docket No.: EMC-01-201

network traffic during the data transfer and responsive to the monitored network traffic characteristics, selectively requesting an effect on the bandwidth allocation, as is recited in the claims.

The Examiner further refers to col. 16, et seq., for Colby teaching “responsive to the monitored network traffic characteristics, selectively requesting an effect on the bandwidth allocation, (Colby, *‘Individual flows within a flow pipe are separately weighted based on the QoS requirements. The flow switch 110 maintains this bandwidth guarantee by proportionally adjusting the weights of the individual flows in the flow pipe so that the sum of the weights remains constant.’*). It is very apparent that the bandwidth to the flow pipes can be adjusted according to weight, which is monitored as stated throughout the prior art.” (see page 8, section 26, lines 2-8). (emphasis in original).

Again applicant respectfully disagrees with the Examiner’s assessment of the teachings of Colby in that Colby teaches reserving appropriate bandwidth in each of the flow-pipes and allocated flow based on the reserved bandwidth, (“[t]he properties of each of the VWH’s is configured by the system administrator. For example, for each VWH’s has a bandwidth reservation. The flow switch uses the bandwidth reservation of a VWH to determine the bandwidth to be **reserved** for the flow pipe associated with the VWH (emphasis added). (see col. 16, lines 48-53). Colby further discloses that “[t]he flow switch guarantees that the average total bandwidth actually available to the flow pipe at any given time is not less than the bandwidth **configured** for the flow pipe regardless of the other activity in the flow switch. (emphasis added). (see col. 16, lines 61-64). “the flow switch 110 maintains this bandwidth guarantee by proportionally adjusting the weights of the individual flows in the flow pipe so that the sum of the weights remains constant.” (see col. 16, line 67-col. 17, line 2).

Colby, accordingly, configures the flow pipe by reserving appropriate bandwidth and adjusting the flow in each pipe by adjusting the weights in the individual flows. However, Colby fails to teach of monitoring the network and making such adjustments.

As argued in applicant’s response to the previous Office Action, Chiou fails to provide any teaching to correct the deficiency found to exist in the teaching of Colby. Hence, even if the teachings of Colby and Chiou were combined, the combination would not disclose each of the elements recited in independent claim 1, for example.

Applicant: Yao Wang, *et al.*
U.S.S.N.: 10/017,304
Filing Date: December 11, 2001
EMC Docket No.: EMC-01-201

For at least this reason, applicant submits that the invention claimed is not rendered obvious over Colby and Chiou and respectfully requests that the rejection be withdrawn.

The remaining independent claims recite subject matter similar to that recited in claim 1 and, hence, are also not rendered obvious based on the cited references for the same remarks made with regard to claim 1.

Accordingly, applicant respectfully requests that the rejection be withdrawn.

With regard to the remaining claims, which ultimately depend from the independent claims, these claims are also allowable by virtue of their dependency from an allowable base claim.

For at least this reason, applicant respectfully requests that the rejection be withdrawn.

Claims 17 and 27 stand rejected under 35 USC 103(a) for allegedly being unpatentable over Colby and Chiou in view of Lyon (USP no. 6,028,841).

The aforementioned claims are dependent from an independent claim discussed above. As shown, the independent claim is not rendered obvious in view of the teachings of Colby and Chiou and the additional reference cited fails to provide any teaching to correct the deficiencies found to exist in the combination of Colby and Chiou.

Accordingly, the aforementioned remaining claims are also allowable by virtue of their dependence from an allowable base claim.

For at least this reason, applicant respectfully requests that the rejection be withdrawn.

Applicant: Yao Wang, *et al.*
U.S.S.N.: 10/017,304
Filing Date: December 11, 2001
EMC Docket No.: EMC-01-201

In the event the Examiner deems personal contact desirable in the disposition of this matter, the Examiner is invited to call the undersigned attorney.

Please charge all fees occasioned by this submission to Deposit Account No. 05-0889.

Respectfully submitted,

Dated: 11/7/04


Carl A. Giordano, Esq. (Reg. No. 41,780)
Attorney for Applicants
EMC Corporation
Office of General Counsel
44 S. Broadway
White Plains, NY 10601
(914) 798 8505

Kindly direct all written communications to:

EMC Corporation
Office of General Counsel
176 South Street
Hopkinton, MA 01748
Telephone: (508) 293-6985
Facsimile: (508) 293-7189